### Milwaukee County COVID-19 vaccine data summary

### Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on January 19, 2022 and includes data through January 17, 2022. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses (second dose following Johnson & Johnson primary vaccination or third dose following Pfizer or Moderna primary vaccination series).

Milwaukee County COVID-19 Vaccination Total December 15, 2020 - January 17, 2022	als		
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,113,023	626,751	486,272
Pfizer	683,873	408,053	275,820
Pfizer Age 5-11	38,402	17,095	21,307
Moderna	356,546	181,196	175,350
Johnson & Johnson	34,202	20,407	13,795
Total vaccine doses administered (including boosters)	1,363,898	749,074	614,824
Pfizer	832,276	485,494	346,782
Pfizer Age 5-11	38,402	17,095	21,307
Moderna	456,593	224,849	231,744
Johnson & Johnson	36,627	21,636	14,991
*Total individuals with one or more doses	597,062	339,336	257,726
Pfizer	355,555	213,704	141,851
Pfizer Age 5-11	22,553	10,663	11,890
Moderna	184,752	94,562	90,190
Johnson & Johnson	34,202	20,407	13,795
*Total individuals completely vaccinated	550,163	307,822	242,341
Pfizer	328,178	194,222	133,956
Pfizer Age 5-11	15,955	6,486	9,469
Moderna	171,828	86,707	85,121
Johnson & Johnson	34,202	20,407	13,795
*Total individuals boosted	250,875	122,323	128,552
Pfizer	146,374	74,960	71,414
Pfizer Age 5-11	1	0	1
Moderna	92,945	41,322	51,623
Johnson & Johnson	11,555	6,041	5,514
*Individuals are grouped by the first vaccine product product for their second dose in a series		· · · · · · · · · · · · · · · · · · ·	

Percentage of Population Vaccinated December 15, 2020 - January 17, 2022				
	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	62.6%	67.3%	72.1%	73.1%
Completely vaccinated	57.7%	62.0%	67.1%	68.1%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	56.9%	61.5%	67.1%	68.4%
Completely vaccinated	51.6%	55.8%	61.6%	62.9%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	72.1%	76.7%	80.1%	80.5%
Completely vaccinated	67.8%	72.1%	75.9%	76.3%
*Population estimates from 2018 US Cens	us American Con	nmunity Survey		

Percentage of Population Boosted December 15, 2020 - January 17, 2022		
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	463,788
Received booster dose	26.3%	54.0%
City of Milwaukee		
*Population	596,886	253,048
Received booster dose	20.5%	48.2%
Milwaukee County Suburbs		
*Population	357,323	210,740
Received booster dose	36.0%	61.0%
*Overall population estimates from 2018 U **Booster eligible population is aged 12+ of August 20, 2021 for Pfizer or Moderna ser Johnson & Johnson	with complete prima	ry vaccination prior to

#### Daily COVID-19 doses administered to Milwaukee County residents

**Figure 1** shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,363,898 doses (including boosters) have been administered from December 15, 2020 through January 17, 2022. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson or second dose of Pfizer or Moderna). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

14000 Booster dose Primary vaccination completion dose 12000 Primary vaccination dose 1 of series 10000 Daily doses 8000 6000 4000 2000 way to Jun's Mayor Jun-01 Date

Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents

**Figure 2a and 2b** show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

14000 7-day average

Pfizer

Pfizer Age 5-11

Moderna

Johnson & Johnson

Date

Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

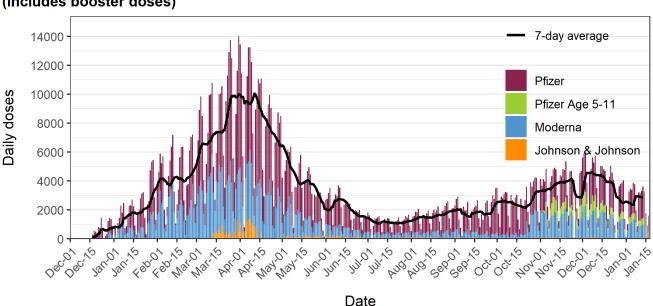


Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

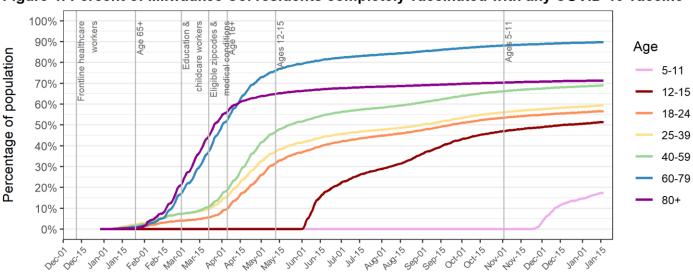
# Percentages of Milwaukee County residents partially and completely vaccinated by age group

**Figure 3** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

100% Education & childcare workers gible zipcodes & 90% Age Percentage of population 80% **5-11** 70% 12-15 60% 18-24 50% 25-39 40% 40-59 30% 60-79 20% <del>80+</del> 10% 48075 POLYS 118415 Mayor AUS'S POLO Date of first dose

Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date of primary vaccination completion dose

Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

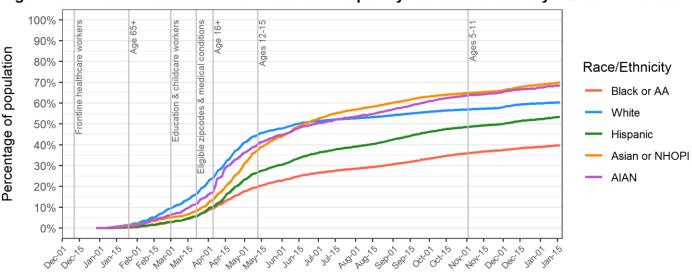
## Proportions of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

**Figure 5** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

100% Education & childcare workers 90% Age Percentage of population 80% Race/Ethnicity 70% Black or AA 60% White 50% Hispanic 40% Asian or NHOPI 30% AIAN 20% 10% May-01 Date of first dose

Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine

Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Date of primary vaccination completion dose

Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

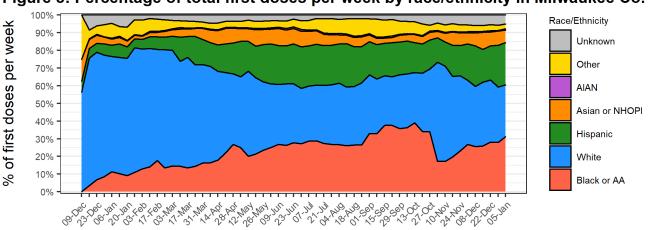
#### Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

**Figure 7** shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middleaged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. A similar increase was observed with the new eligibility of children ages 5-11.

**Figure 8** shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co. % of first doses per week 80+ 90% 80% 60-79 70% 40-59 60% 25-39 50% 40% 18-24 30% 16-17 20% 12-15 10% 5-11 67.11 ig box box box low low has his his 

Start day of week Data source: Wisconsin Immunization Registry (WIR) Created by the Milwaukee County COVID-19 Epidemiology Intel Team



Start day of week

Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.

Data source: Wisconsin Immunization Registry (WIR)

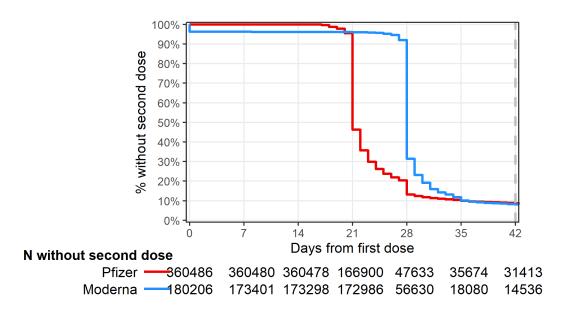
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

### Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

**Figure 9** describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to December 5, 2021). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 91.5% of all residents who received their first dose of Pfizer prior to December 5, 2021 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna



# Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

**Table 1** summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna receipients <sup>1</sup>	*Percent boosted among eligible <sup>1</sup>
First vaccine received		
Pfizer	329,062 / 360,475 (91.3%)	146,128 / 274,197 (53.3%)
Moderna	165,670 / 180,206 (91.9%)	92,864 / 156,450 (59.4%)
Johnson & Johnson		11,554 / 33,141 (34.9%)
Age		
5-11	13,169 / 14,825 (88.8%)	
12-15	23,929 / 26,353 (90.8%)	2,207 / 16,026 (13.8%)
16-17	12,222 / 13,526 (90.4%)	3,016 / 9,798 (30.8%)
18-24	44,591 / 50,839 (87.7%)	13,852 / 42,400 (32.7%)
25-39	117,464 / 130,497 (90.0%)	51,201 / 110,853 (46.2%)
40-59	140,183 / 152,163 (92.1%)	75,208 / 139,218 (54.0%)
60-79	119,237 / 126,814 (94.0%)	87,471 / 121,197 (72.2%)
80+	23,937 / 25,664 (93.3%)	17,591 / 24,296 (72.4%)
Sex		
Female	267,568 / 291,114 (91.9%)	138,632 / 247,736 (56.0%)
Male	226,094 / 248,270 (91.1%)	111,561 / 214,937 (51.9%)
Unknown	1,070 / 1,297 (82.5%)	353 / 1,115 (31.7%)
Race/Ethnicity		
Black or AA	85,640 / 98,115 (87.3%)	33,243 / 74,814 (44.4%)
White	272,618 / 290,129 (94.0%)	167,163 / 265,717 (62.9%)
Hispanic	65,317 / 73,351 (89.0%)	21,150 / 57,950 (36.5%)
Asian or NHOPI	26,253 / 28,580 (91.9%)	9,846 / 23,968 (41.1%)
AIAN	2,827 / 3,143 (89.9%)	1,292 / 2,623 (49.3%)
Other	26,358 / 29,210 (90.2%)	12,700 / 22,600 (56.2%)
Unknown	15,719 / 18,153 (86.6%)	5,152 / 16,116 (32.0%)

¹n / N (%)

<sup>\*</sup>Booster eligible population is aged 12+ with complete primary vaccination prior to August 20, 2021 for Pfizer or Moderna series, or prior to November 18, 2021 for Johnson & Johnson

### **Data Sources & Acknowledgments**

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

#### **Contact Information**

For additional questions on this report, please contact Darren Rausch, Health Officer/Director, Greenfield Health Department, and Lead, Milwaukee County COVID-19 Epidemiology Intel Team: Darren.Rausch@greenfieldwi.us or (414) 329-5275.